

WHAT IS CLAIMED IS:

1. An image processing apparatus comprising:

image development means for generating first image
data and first discrimination data representing
5 attributes of each of pixels of the first image data on
the basis of information described in a page
description language;

discrimination data generating means for
generating second discrimination data different from
10 the first discrimination data, using the first image
data and the first discrimination data generated by the
image development means;

image data generating means for generating second
image data by correcting the first image data generated
15 by the image development means on the basis of the
second discrimination data generated by the discrimina-
tion data generating means;

image processing means for subjecting the second
image data generated by the image data generating means
20 to a predetermined process on the basis of the second
discrimination data generated by the discrimination
data generating means; and

image output means for outputting image data
processed by the image processing means.

25 2. An image processing apparatus according to
claim 1, wherein the image development means generates
first discrimination data that discriminates whether

each pixel is associated with a character, or a line figure described by a straight line and a curve.

3. An image processing apparatus according to claim 1, wherein the discrimination data generating means generates second discrimination data that does not discriminate whether each pixel is associated with a character, or a line figure described by a straight line and a curve, using the first image data generated by the image development means.

4. An image processing apparatus according to claim 1, wherein the image development means generates first discrimination data that does not discriminate whether each pixel is associated with a line figure described by a straight line and a curve, or a plane figure, the entirety or each component of which is painted out with uniform density.

5. An image processing apparatus according to claim 1, wherein the discrimination data generating means generates second discrimination data that discriminates whether each pixel is associated with a line figure described by a straight line and a curve, or a plane figure, the entirety or each component of which is painted out with uniform density, using the first image data generated by the image development means.

6. An image processing apparatus according to claim 1, wherein the image development means generates

first discrimination data that does not discriminate between a contour portion and an inside portion of a plane figure painted out with uniform density.

7. An image processing apparatus according to claim 1, wherein the discrimination data generating means generates second discrimination data that discriminates between a contour portion and an inside portion of a plane figure painted out with uniform density, using the first image data generated by the image development means.

8. An image processing apparatus according to claim 1, wherein the image development means generates first discrimination data that discriminates between a plane figure painted out with uniform density and a tone image.

9. An image processing apparatus according to claim 1, wherein the discrimination data generating means generates second discrimination data that does not discriminate between a plane figure painted out with uniform density and a tone image, using the first image data generated by the image development means.

10. An image processing apparatus according to claim 1, wherein the image development means generates first discrimination data that discriminates that each pixel is associated with a tone image.

11. An image processing apparatus according to claim 1, wherein the discrimination data generating

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means generates second discrimination data that discriminates the magnitude of density variation in each pixel, using the first image data generated by the image development means.

5 12. An image processing apparatus according to claim 1, wherein the discrimination data generating means generates, when the first image data generated by the image development means is color image data comprising plural color components, second discrimina-
10 tion data which represents attributes of each pixel for each color component and is different from the first discrimination data, using the color image data.

13. An image processing apparatus according to claim 1, wherein the image generating means generates,
15 where the first image data generated by the image development means is color image data comprising plural color components and where at least one color component of each pixel of the color image data is associated with a character or a line figure described by a
20 straight line and a curve, second image data by replacing the data other than said color component with data of a peripheral pixel of said pixel and thus correcting the first image data.

25 14. An image processing apparatus according to claim 1, wherein the image data generating means generates second image data by subjecting a pixel of a line figure described by a straight line and a curve or

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a character of the first image data generated by the image development means to a smoothing process for providing a smooth density variation, on the basis of the second discrimination data generated by the discrimination data generating means.

15. An image processing apparatus comprising:

image development means for generating first image data and first discrimination data representing attributes of each of pixels of the first image data on the basis of information described in a page description language;

discrimination data generating means for generating second discrimination data different from the first discrimination data, using the first image data generated by the image development means;

image data generating means for generating second image data by correcting the first image data generated by the image development means on the basis of the second discrimination data generated by the discrimination data generating means and the first discrimination data generated by the image development means;

image processing means for subjecting the second image data generated by the image data generating means to a predetermined process on the basis of the first discrimination data generated by the image development means and the second discrimination data generated by

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the discrimination data generating means; and

image output means for outputting image data processed by the image processing means.

16. An image processing apparatus comprising:

5 image development means for generating first image data and first discrimination data representing attributes of each of pixels of the first image data on the basis of information described in a page description language;

10 discrimination data generating means for generating second discrimination data different from the first discrimination data, using the first image data generated by the image development means or using the first image data and the first discrimination data;

15 image processing means for subjecting the first image data generated by the image development means to a predetermined process on the basis of the second discrimination data generated by the discrimination data generating means and the first discrimination data generated by the image development means; and

20 image output means for outputting image data processed by the image processing means.

17. An image processing apparatus comprising:

25 input means for inputting data from an external unit that generates first image data and first discrimination data representing attributes of each of pixels of the first image data;

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setting means for desiredly setting the type of attributes represented by the first discrimination data input by the input means;

5 discrimination data generating means for generating second discrimination data different from the first discrimination data, using the type of attributes set by the setting means and the first image data and the first discrimination data input by the input means;

10 image data generating means for generating second image data by correcting the first image data input by the input means on the basis of the second discrimination data generated by the discrimination data generating means;

15 image processing means for subjecting the second image data generated by the image data generating means to a predetermined process on the basis of the second discrimination data generated by the discrimination data generating means; and

20 image output means for outputting image data processed by the image processing means.

18. An image processing apparatus comprising:

input means for inputting data from an external unit that generates first image data and first
25 discrimination data representing attributes of each of pixels of the first image data;

discrimination data generating means for

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generating second discrimination data different from the first discrimination data, using the first image data input by the input means;

5 setting means for desirably setting the type of attributes represented by the first discrimination data input by the input means;

10 image data generating means for generating second image data by correcting the first image data input by the input means on the basis of the type of attributes set by the setting means, the first discrimination data input by the input means and the second discrimination data generated by the discrimination data generating means;

15 image processing means for subjecting the second image data generated by the image data generating means to a predetermined process on the basis of the type of attributes set by the setting means, the first discrimination data input by the input means and the second discrimination data generated by the
20 discrimination data generating means; and

image output means for outputting image data processed by the image processing means.

19. An image processing apparatus comprising:

25 input means for inputting data from an external unit that generates first image data and first discrimination data representing attributes of each of pixels of the first image data;

discrimination data generating means for
generating second discrimination data different from
the first discrimination data, using the first image
data input by the input means;

5 setting means for desiredly setting the type of
attributes represented by the first discrimination data
input by the input means;

10 image processing means for subjecting the first
image data input by the input means to a predetermined
process on the basis of the type of attributes set by
the setting means, the first discrimination data input
by the input means and the second discrimination data
generated by the discrimination data generating means;
and

15 image output means for outputting image data
processed by the image processing means.

20. An image processing method for image-
processing information described in a page description
language, and outputting an image, comprising:

20 generating first image data and first
discrimination data representing attributes of each of
pixels of the first image data on the basis of the
information described in the page description language;

25 generating second discrimination data different
from the first discrimination data, using the generated
first image data and first discrimination data;

generating second image data by correcting the

generated first image data on the basis of the
generated second discrimination data;

subjecting the generated second image data to a
predetermined process on the basis of the generated

5 second discrimination data; and

outputting processed image data.

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